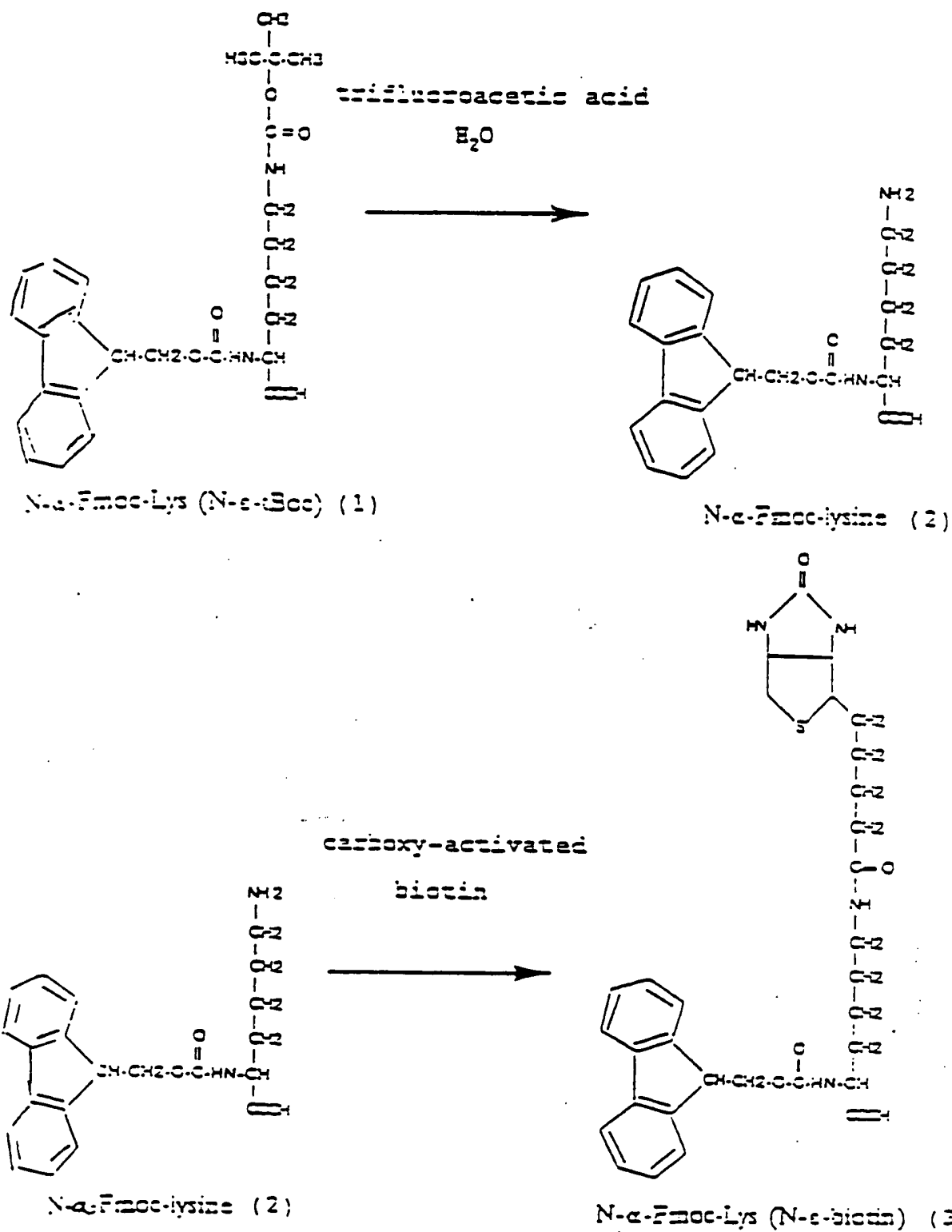


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Figure 1

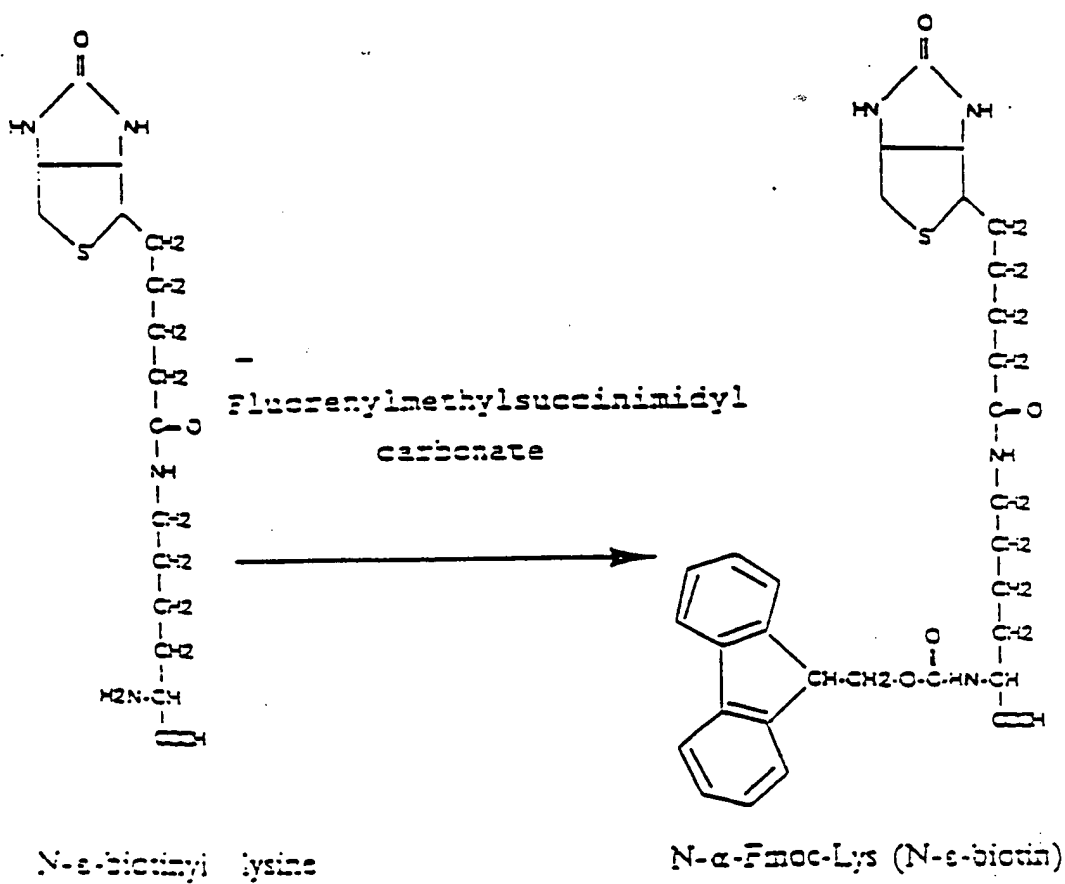
Method A



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Figure 1 Continued

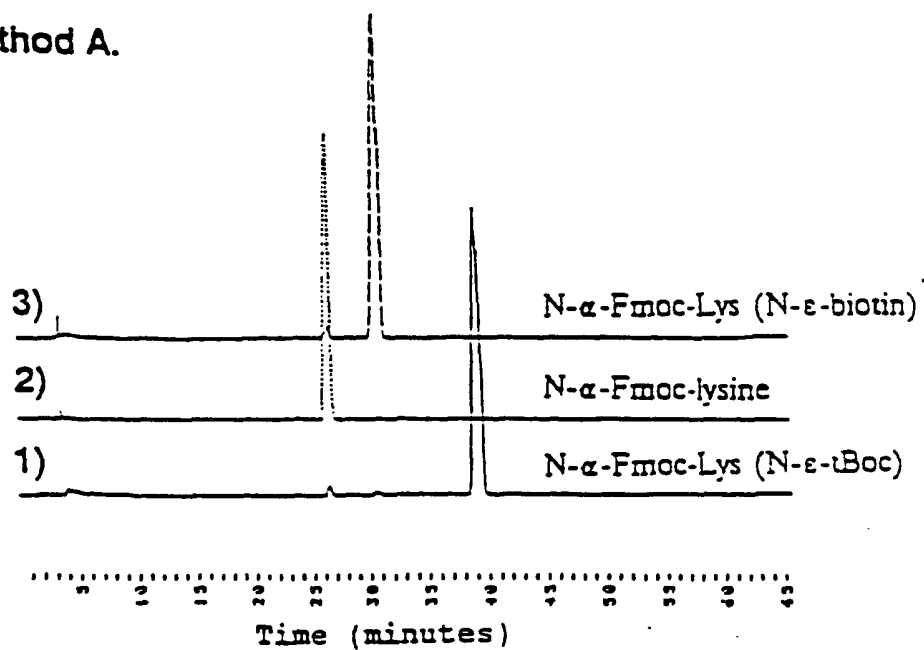
Method B



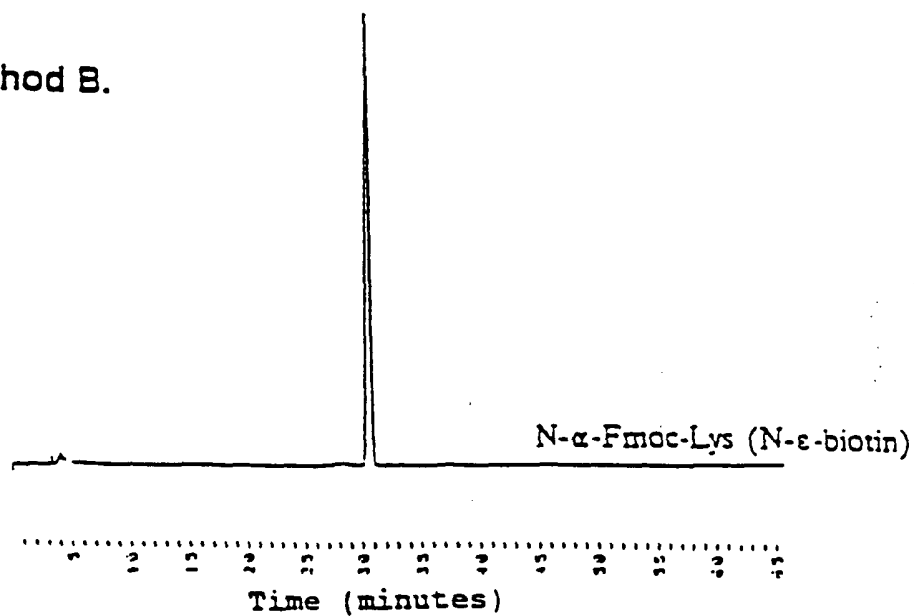
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Figure 2

Method A.

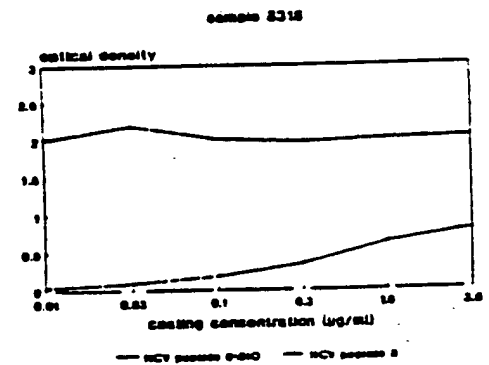
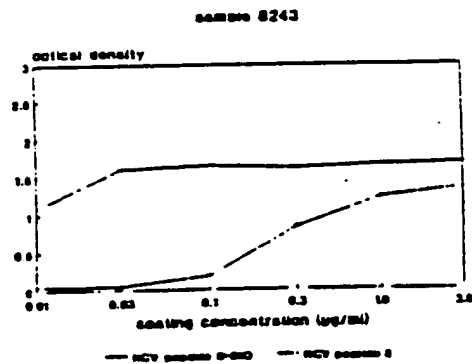
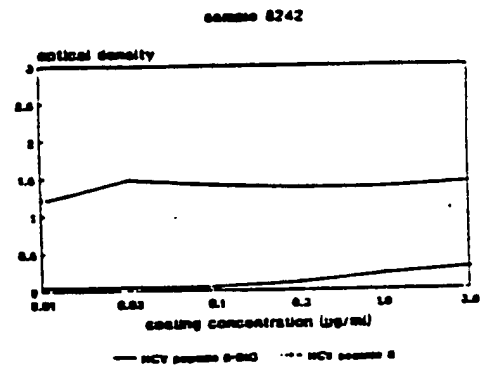
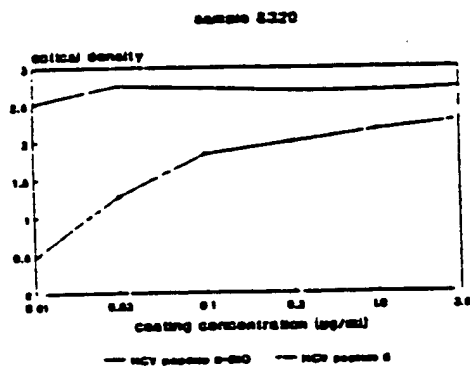


Method B.



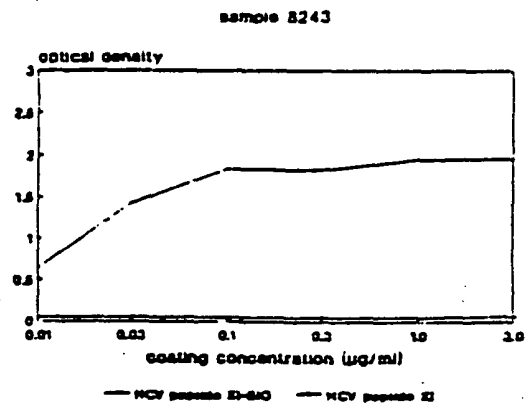
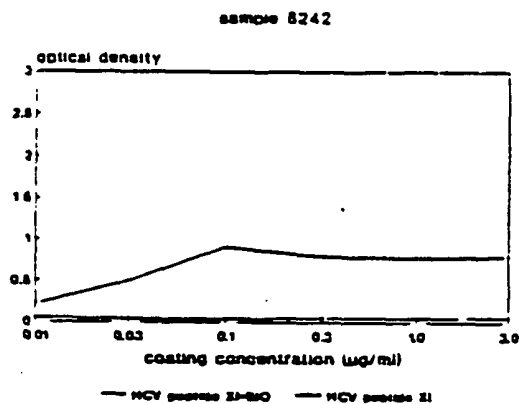
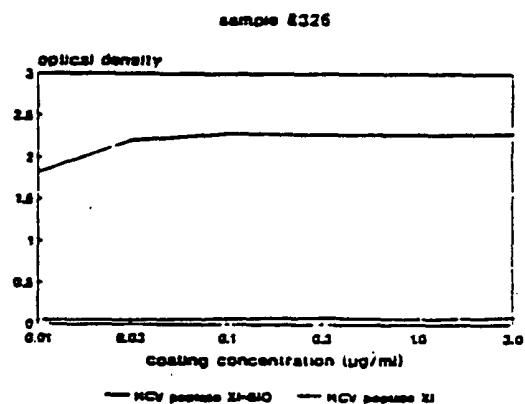
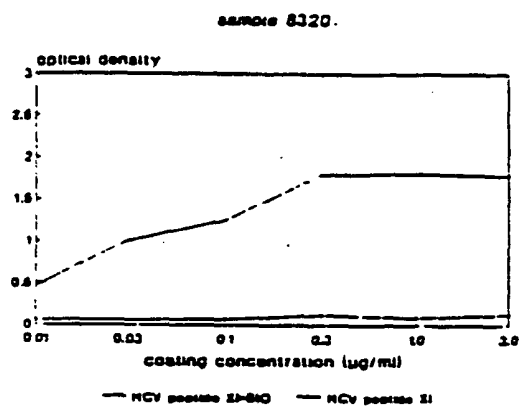
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Figure 3a



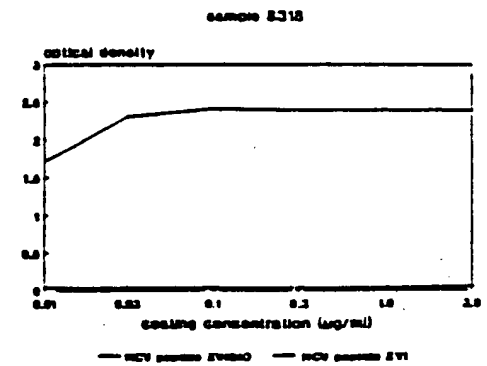
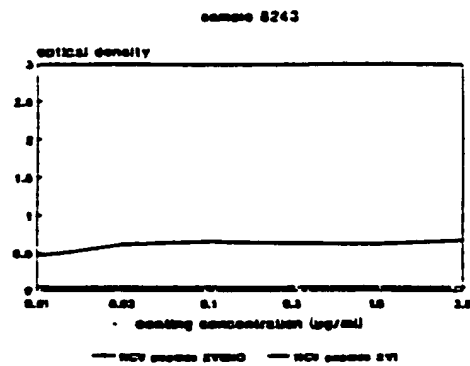
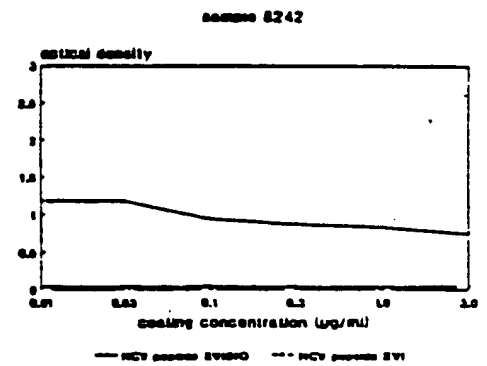
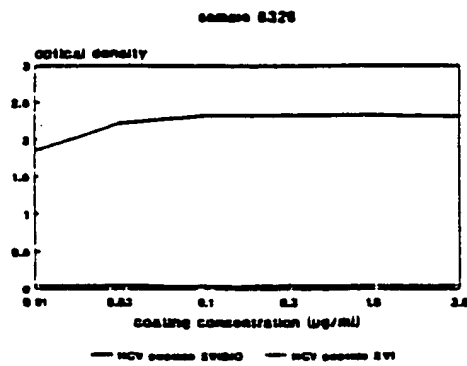
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Figure 3b



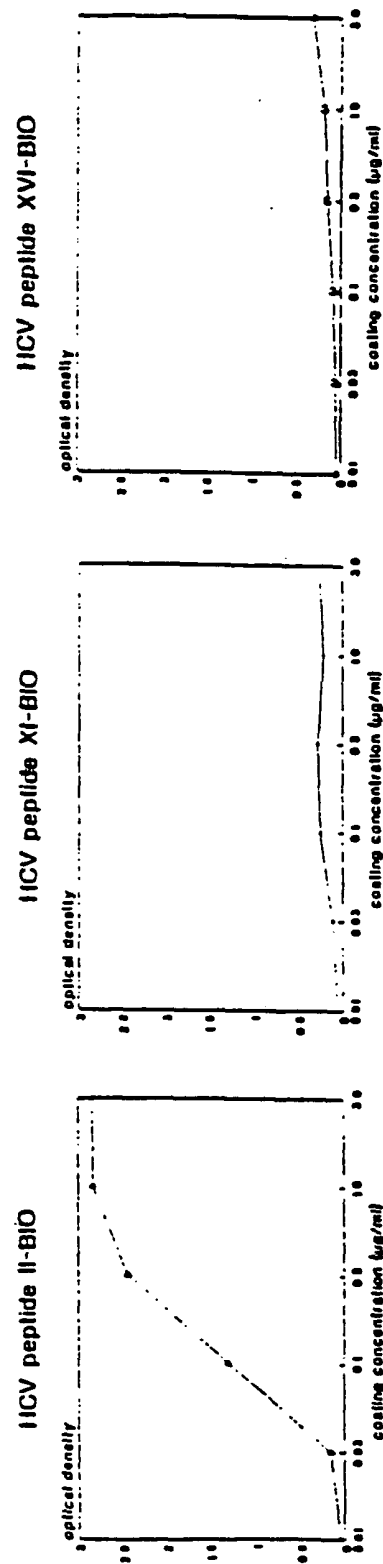
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Figure 3c



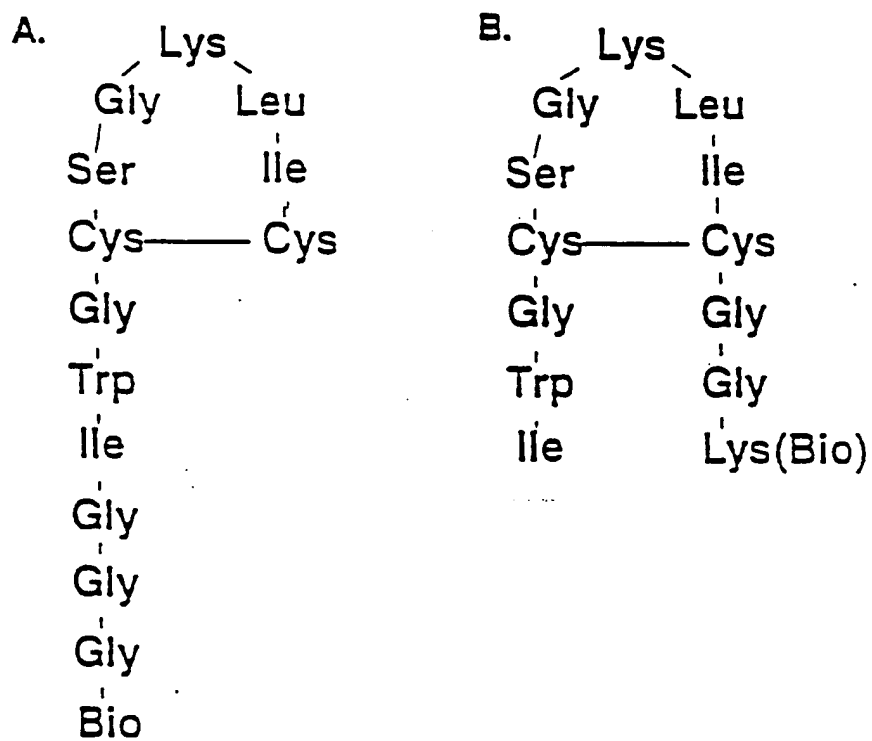
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Figure 4



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Figure 5



N-terminally biotinylated TM peptide

C-terminally biotinylated TM peptide

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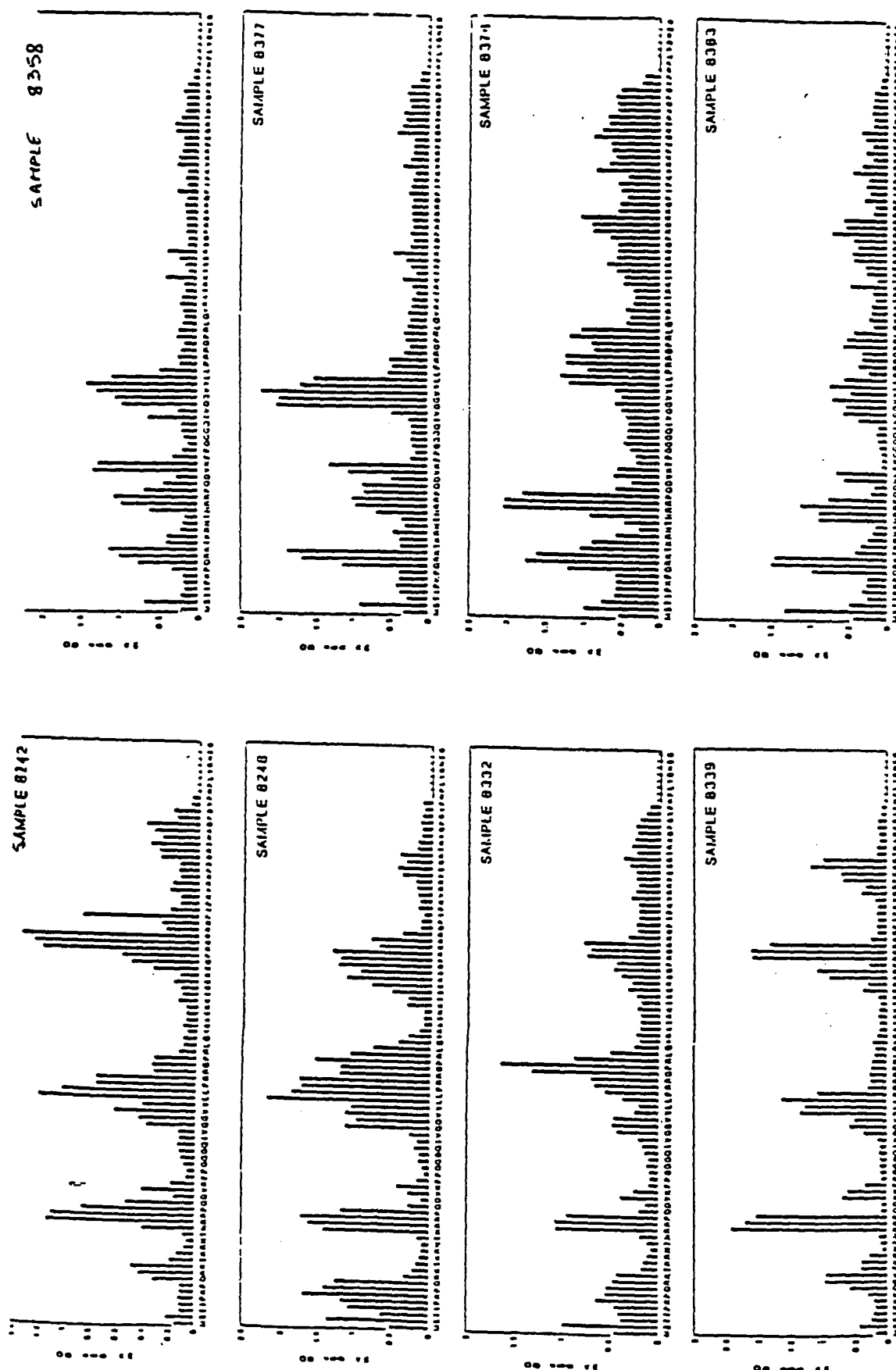
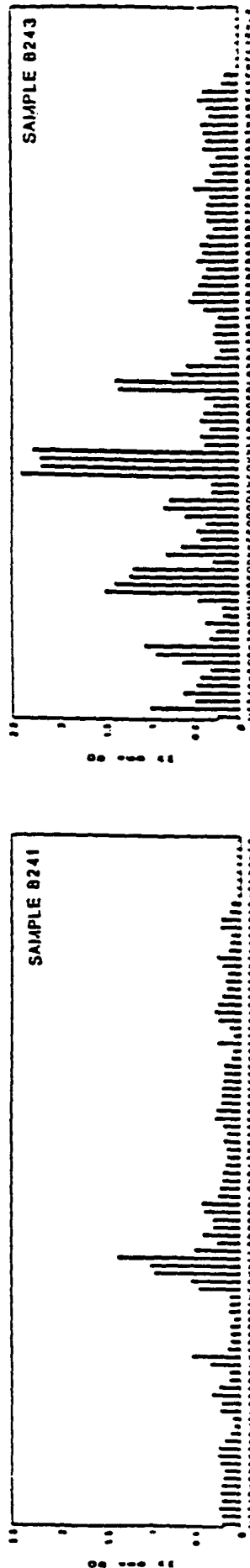


Figure 6a
HCV CORE PEPTIDES (1-13)

Figure 6a (continued)
HCV CORE PEPTIDES (1-13)



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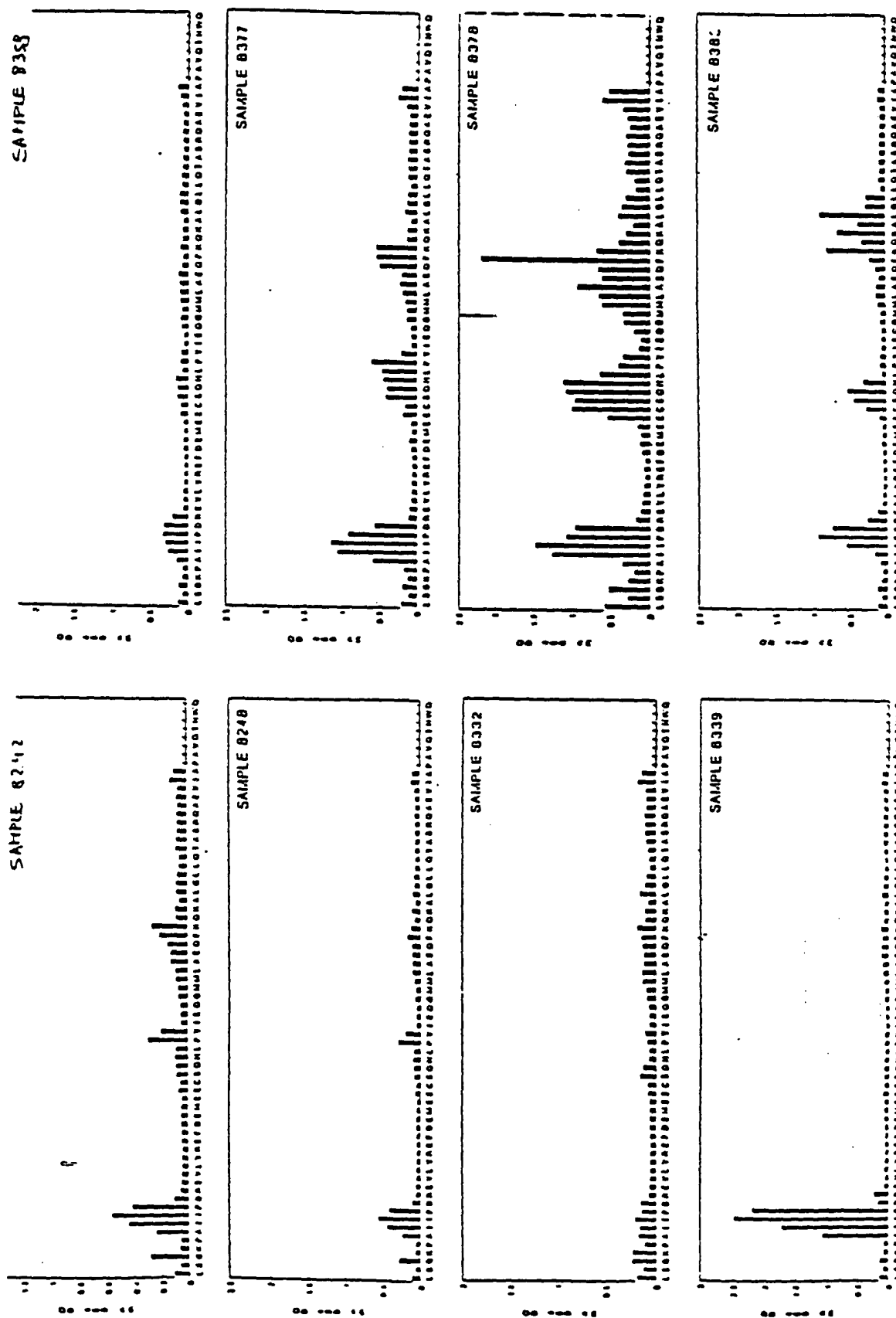


Figure 6b
HCV NS4 PEPTIDES (1-9)

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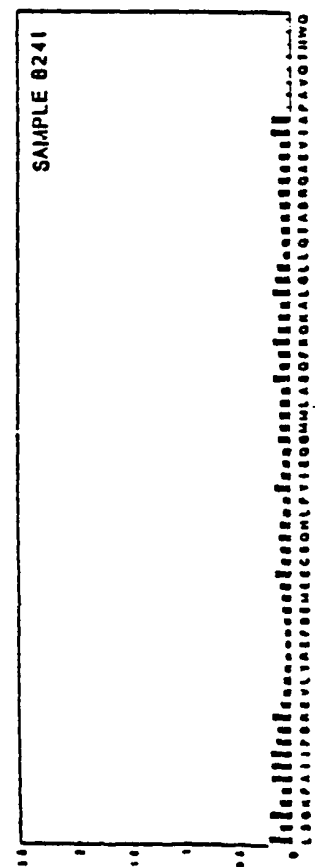
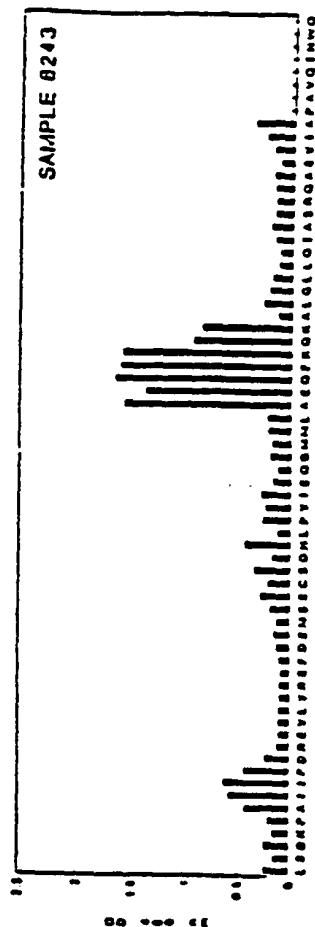
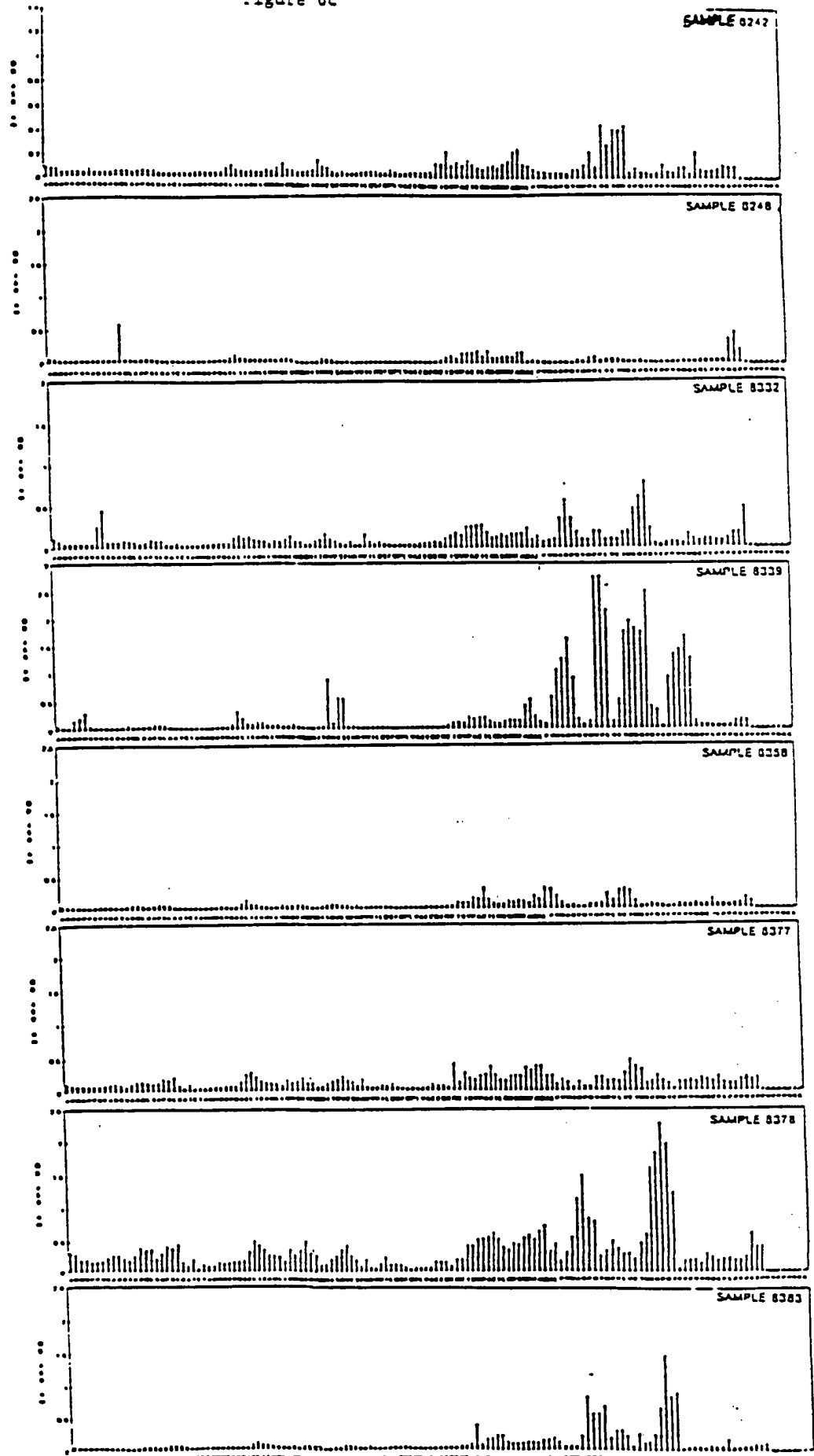


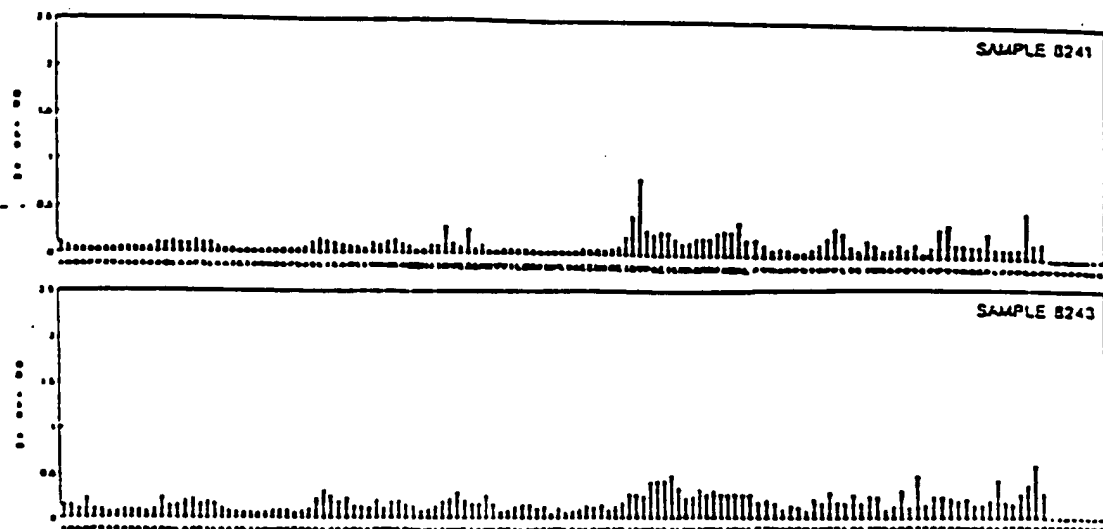
Figure 6b (continued)
HCV NS4 PEPTIDES (1-9)

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Figure 6c



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HCV NSS PEPTIDES (13-33)

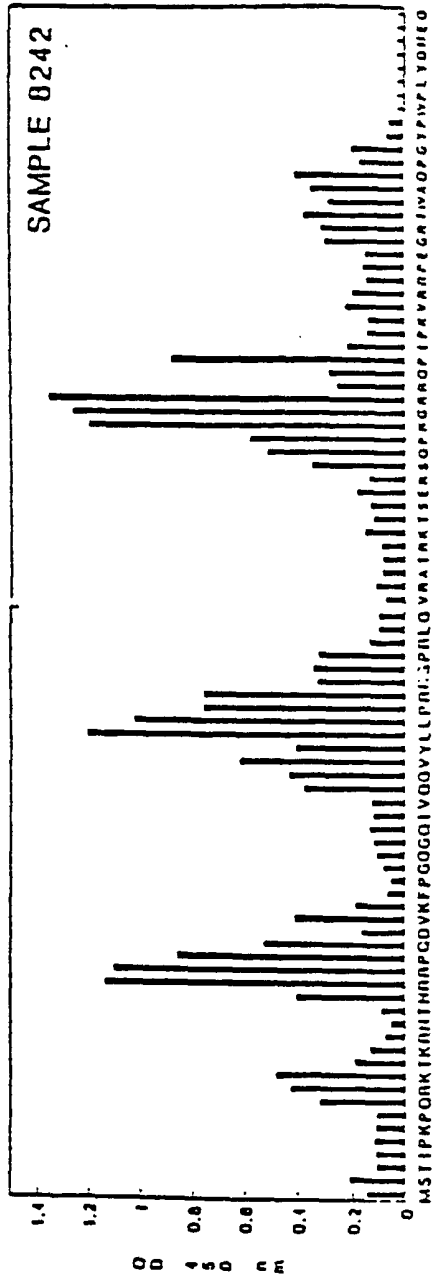
Figure 6c (continued)

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Figure 7a

Core-1 MS I I P K P O R K I K R N I N R R P O
Core-2 P O R K I K R N I N R R P O D V K F P P G
Core-3 R N I N R R P O D V K F P G G G O I V G
Core-5 P G G G O I V G G V Y L L P R R G P R L
Core-7 I R K I S E R S O P R G R H O P I P K V
Core-9 H R O P I P K V R R P E G R I W A O P G
Core-11

Core-1 Peptides	Core-2 Peptides	Core-3 Peptides	Core-5 Peptides	Core-7 Peptides	Core-9 Peptides	Core-11 Peptides
ESTIIPDPA	PQELIKNTA	RHINARFDD	PSGGQIVGG	LPKEDTILEF	DEKTSSESD	KRQPIKIVLE
STIPIFUSIA	COELIKNTA	HINREFDDV	SGQIVGGV	TRKSTALEV	KTSSESD	KQPIKIVLE
TIPIIDGITA	KTIKNTA	HKAPDQVLE	SGQIVGGV	KREFILGYLE	KTESGSLN	QPIKIVLE
IPITPKITA	KTIKNTA	KRPQDVLE	QITPQVLE	IGELGVN	TSLSQVLE	PITVAKCE
PEPKNTA	IKNTA	KRPQDVLE	QIVGGVLE	EPALGVN	SELSQVLE	ITVAKCE
ITPKNTA	IKNTA	KRPQDVLE	IVSEVLE	PLEVRAIA	ESQVLE	ITVAKCE
PKNTA	IKNTA	KRPQDVLE	VEGVLE	ELGVN	ASQVLE	ITVAKCE
SEKNTA	IKNTA	KRPQDVLE	EGVLE	LGVEATIA	SGVLE	ITVAKCE
AKNTA	IKNTA	KRPQDVLE	GVLPAGE	EPVAKIA	QPIKIVLE	ITVAKCE
KTIKNTA	IKNTA	KRPQDVLE	VLEFCE	VRAKIA	PRQPIKIVLE	ITVAKCE
IKNTA	IKNTA	KRPQDVLE	VLPAKPA	KAPITSE	EGKIVLE	ITVAKCE
IKNTA	IKNTA	KRPQDVLE	LLKAGE	AKITSE	ERQPIKIVLE	ITVAKCE



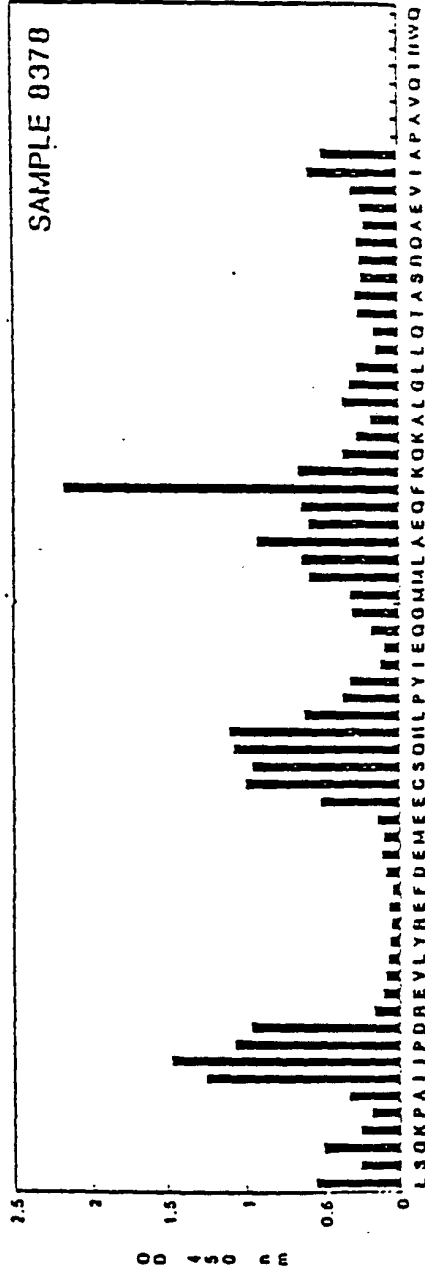
Core-1
Core-2
Core-3
Core-5
Core-7
Core-9
Core-11

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Figure 7b

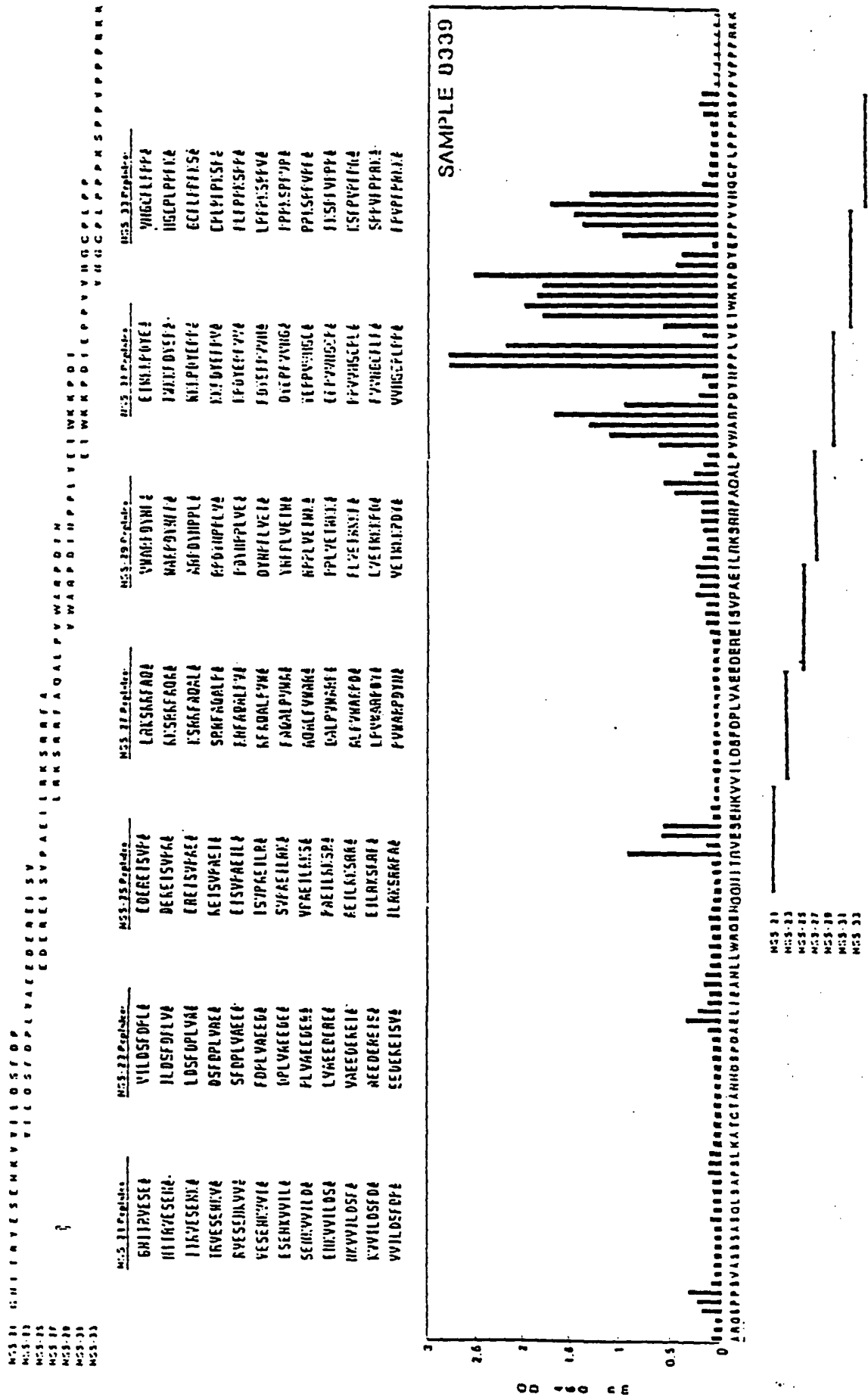
HCV1 L S G K P A I I P D R E V L Y R E F D E
 HCV2 I I P D R E V L Y R E F D E M E E C S O
 HCV3 V L Y R E F D E M E E C S O H I P Y I E
 HCV4 S O H L P Y I E O G M M L A E O F K O K
 HCV5 L A E O F K O K A I G I I O
 HCV6 O K A I G I I O T A S H O A
 HCV7 L O I A S H O A E V I A P A V O T H W O
 HCV9

Peptide	HCV1	HCV2	HCV3	HCV4	HCV5	HCV6	HCV7	HCV8	HCV9
LSGKPAII	LSGKPAII	LSGKPAII	LSGKPAII	LSGKPAII	LSGKPAII	LSGKPAII	LSGKPAII	LSGKPAII	LSGKPAII
IPDREVL	IPDREVL	IPDREVL	IPDREVL	IPDREVL	IPDREVL	IPDREVL	IPDREVL	IPDREVL	IPDREVL
YRERFDE	YRERFDE	YRERFDE	YRERFDE	YRERFDE	YRERFDE	YRERFDE	YRERFDE	YRERFDE	YRERFDE
MEECSON	MEECSON	MEECSON	MEECSON	MEECSON	MEECSON	MEECSON	MEECSON	MEECSON	MEECSON
HIPIYIE	HIPIYIE	HIPIYIE	HIPIYIE	HIPIYIE	HIPIYIE	HIPIYIE	HIPIYIE	HIPIYIE	HIPIYIE
OGMMLAE	OGMMLAE	OGMMLAE	OGMMLAE	OGMMLAE	OGMMLAE	OGMMLAE	OGMMLAE	OGMMLAE	OGMMLAE
OFKOK	OFKOK	OFKOK	OFKOK	OFKOK	OFKOK	OFKOK	OFKOK	OFKOK	OFKOK
AI G I I O	AI G I I O	AI G I I O	AI G I I O	AI G I I O	AI G I I O	AI G I I O	AI G I I O	AI G I I O	AI G I I O
OTASHOA	OTASHOA	OTASHOA	OTASHOA	OTASHOA	OTASHOA	OTASHOA	OTASHOA	OTASHOA	OTASHOA
EV I A P A	EV I A P A	EV I A P A	EV I A P A	EV I A P A	EV I A P A	EV I A P A	EV I A P A	EV I A P A	EV I A P A
V O T H W O	V O T H W O	V O T H W O	V O T H W O	V O T H W O	V O T H W O	V O T H W O	V O T H W O	V O T H W O	V O T H W O

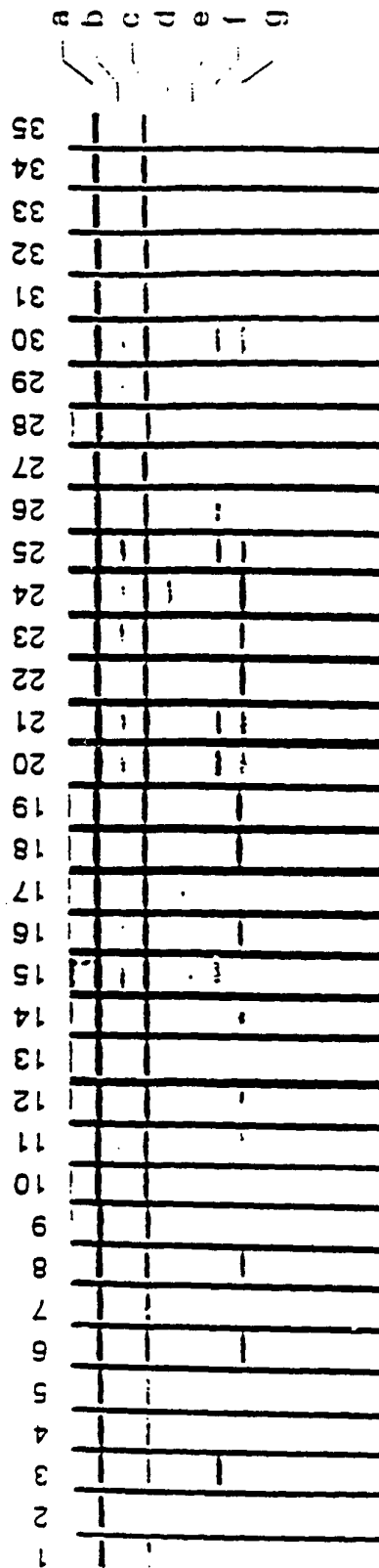


HCV1
 HCV2
 HCV3
 HCV4
 HCV5
 HCV6
 HCV7

Figure 7c



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- a: High intensity control
- b: Low intensity control
- c: Medium intensity control
- d: Peptide XXg-1, unbiotinylated
- e: Peptide XXg-2, unbiotinylated
- f: Biotinylated peptide XXg-1: streptavidin complex
- g: Biotinylated peptide XXg-2: streptavidin complex

Figure 8

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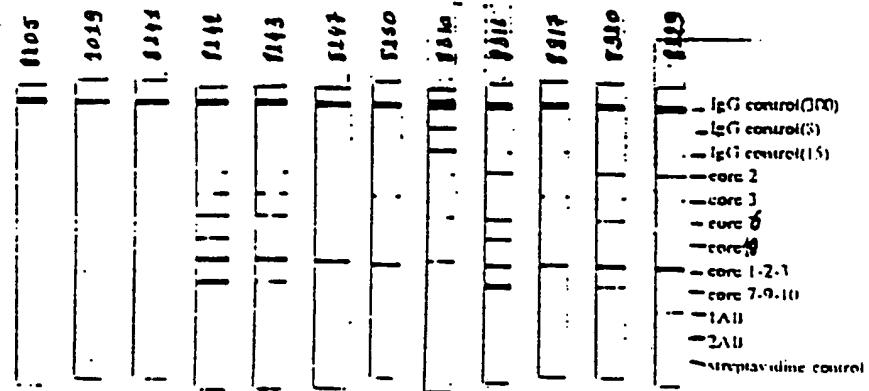


Figure 9

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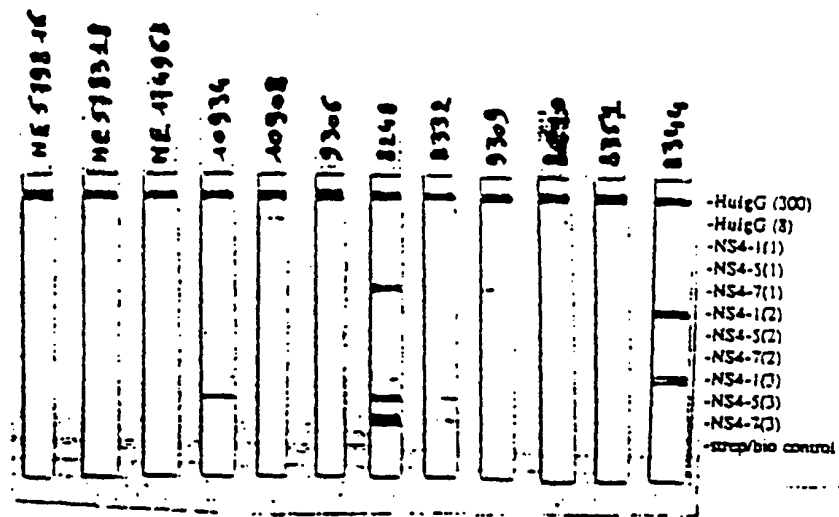


Figure 10

Peptide	Sequence
PS4 a	G A I V A I F I M S G L V P S I I D I V
PS4 b	V P S I I D I V H I I P A I I S P G A I
PS4 c	A I I S P G A I V V G V V C A A I I H R
PS4 d	V C A A I I H R H V G P G E G A V O W M
PS4 e	G E G A V O W M H R I A I A S H G N H

Figure 11

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Peptide	Amino Acid Sequence
Epi-152	Bio- GG - IPDREVL YRGGKKPDYEP PVGGRRPODVKFP <div style="display: flex; justify-content: space-around; margin-top: 5px;"> NS4 epitope 1 NS5 epitope 5 Core epitope 2 </div>
Epi-3383A	Bio- GG - WARPDYNPPGGOFKOKALGLGSGVYLLPRRG <div style="display: flex; justify-content: space-around; margin-top: 5px;"> NS5 epitope 3 NS4 epitope 3B Core epitope 3A </div>
Epi-482A6	Bio- GG - RGRROPIPKGGSOHLPLYEOSGPVVHGCPLP <div style="display: flex; justify-content: space-around; margin-top: 5px;"> Core epitope 4B NS4 epitope 2A NS5 epitope 6 </div>

Figure 12

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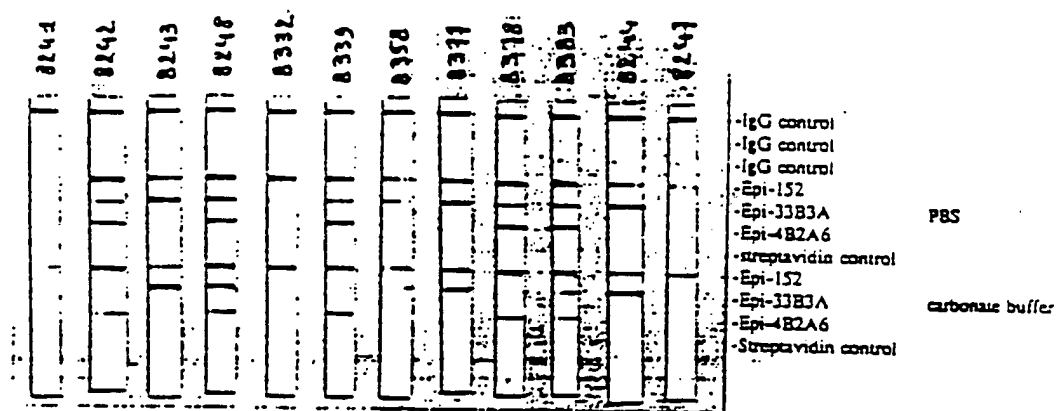
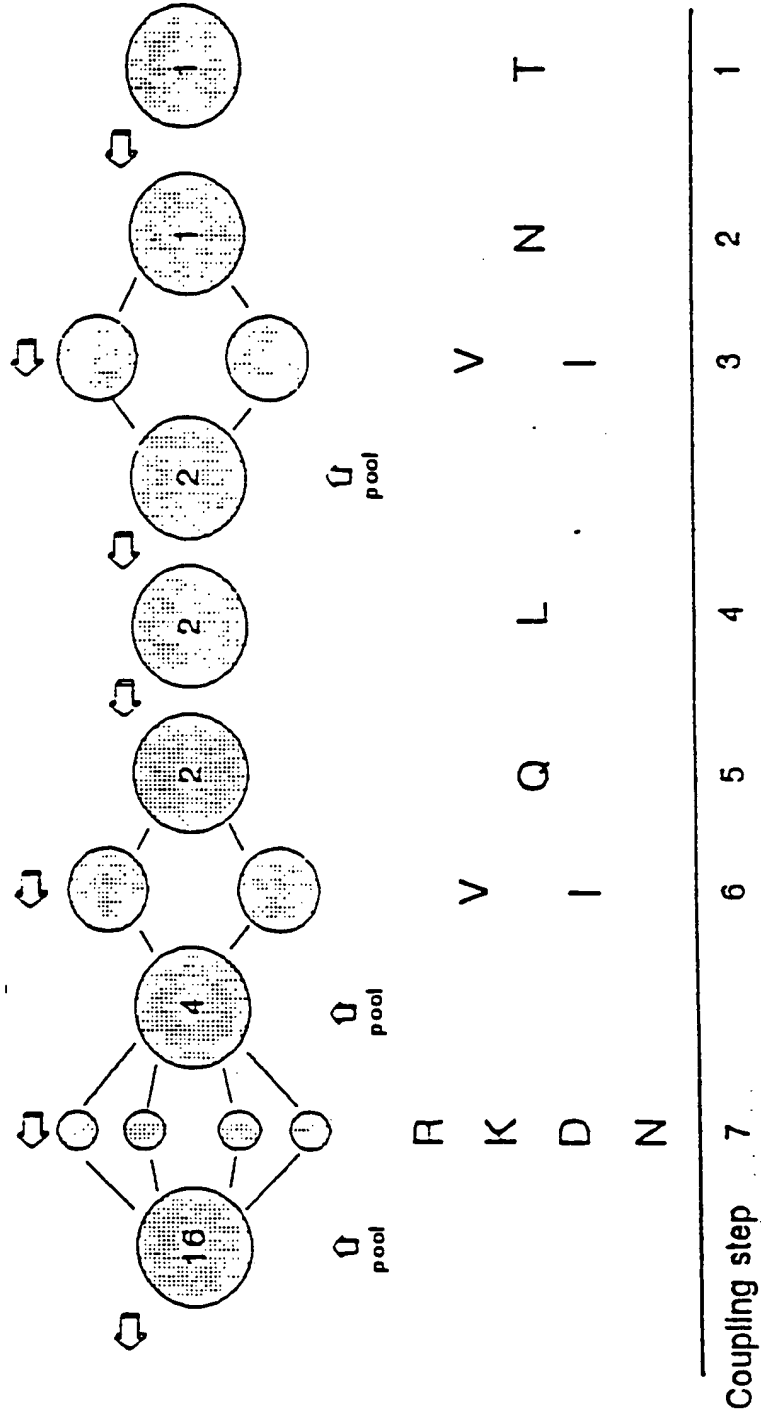
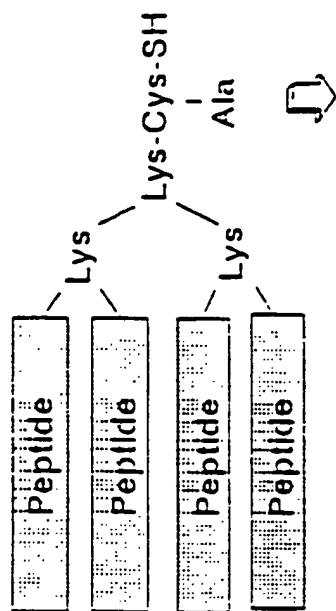


Figure 13

Mixotope Synthesis Strategy.



Direction of synthesis



Oxidation and dimerization

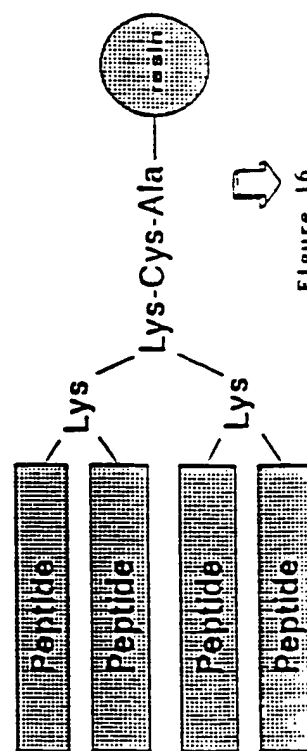
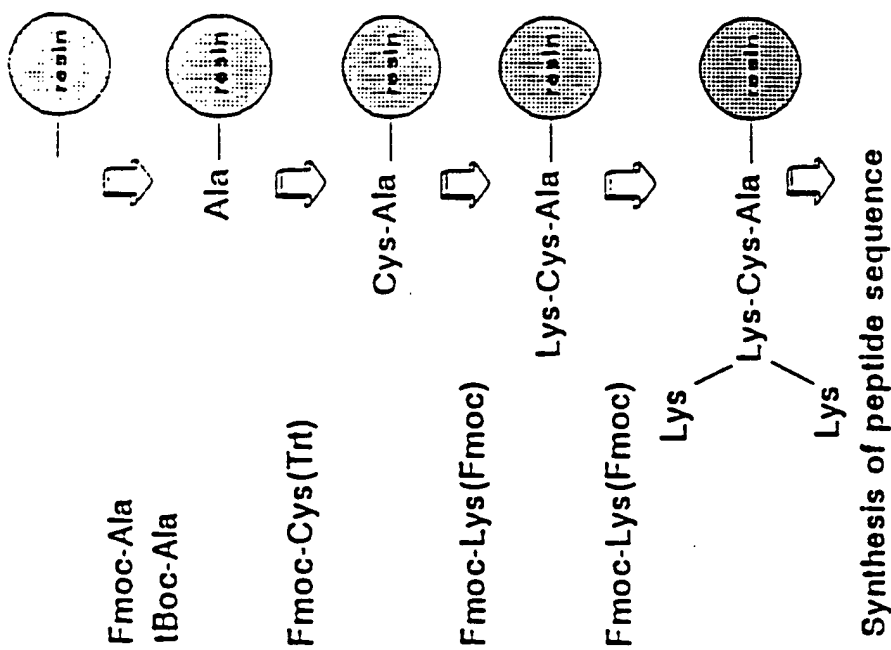
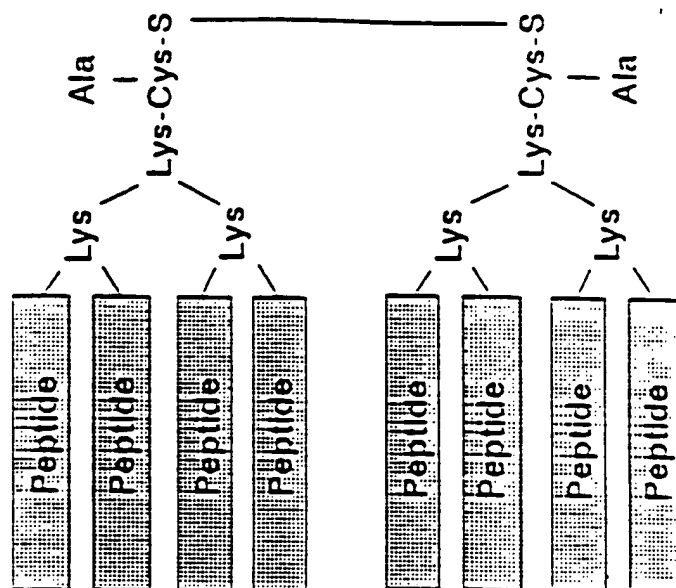


Figure 16

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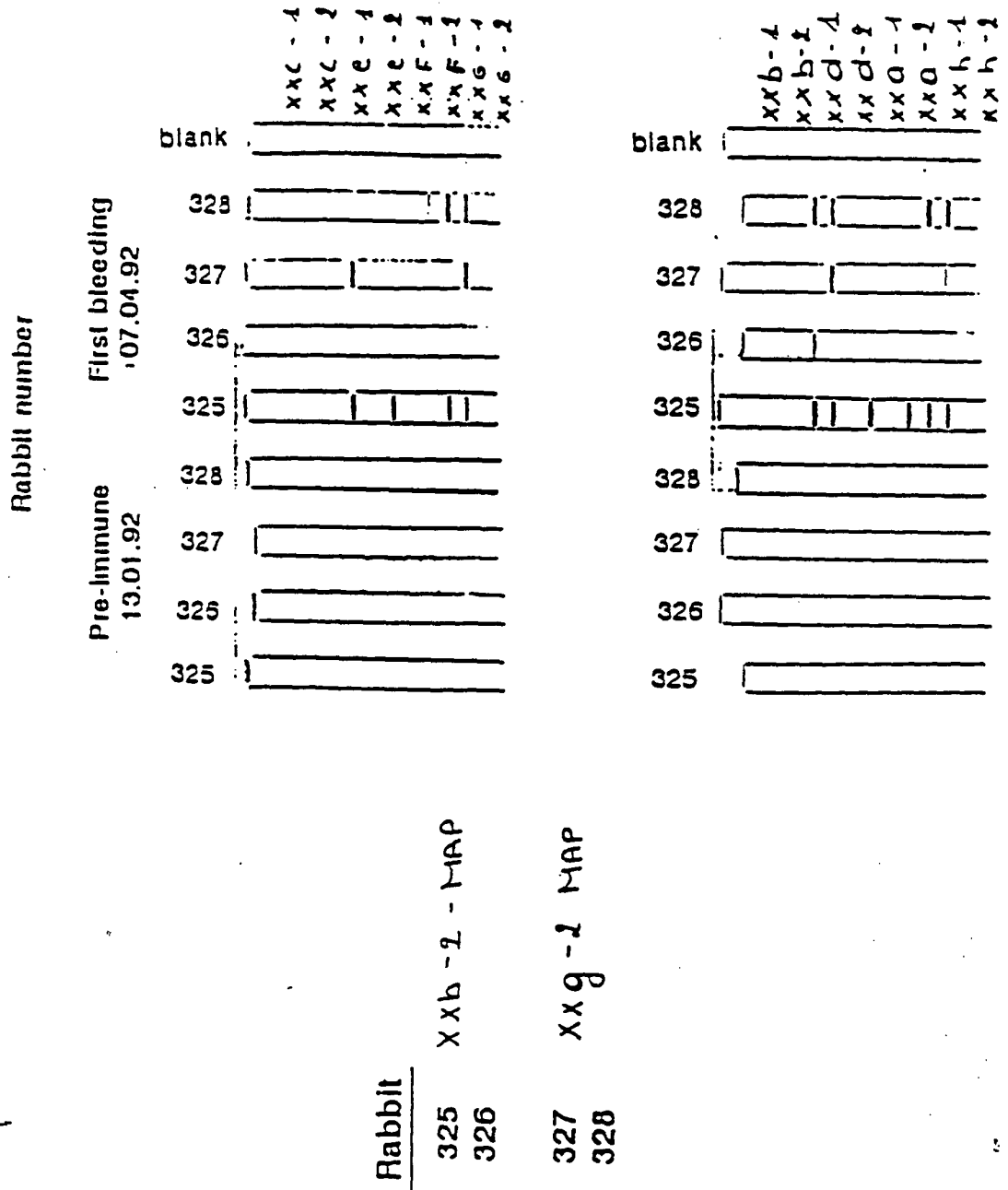


FIGURE 18

